

REMARKS

Claims 1 and 22-42 are pending in the present application. By this Amendment, previously presented claims 34-36 have been amended. Previously presented claims 1 and 33 have been withdrawn from consideration. Applicants respectfully request reconsideration of the present claims in view of the foregoing amendments and the following remarks.

I. Formal Matters:

Restriction and Election of Species Requirement:

Applicants note that the October 26, 2009 Office Action makes FINAL the previous restriction requirement and election of species.

As shown above, previously presented claim 34 has been amended to depend from previously presented claim 25. Applicants respectfully request consideration of currently amended claim 34.

At this time, previously presented claims 1 and 33 are withdrawn from consideration. However, Applicants note that MPEP §1893.03(d) provides the following instructions relating to rejoinder of withdrawn claims:

If an examiner (1) determines that the claims lack unity of invention and (2) requires election of a single invention, when all of the claims drawn to the elected invention are allowable (i.e., meet the requirements of 35 U.S.C. 101, 102, 103 and 112), the nonelected invention(s) should be considered for rejoinder. Any nonelected product claim that requires all the limitations of an allowable product claim, and any nonelected process claim that requires all the limitations of an allowable process claim, should be rejoined. See MPEP § 821.04**. Any nonelected processes of making and/or using an allowable product should be considered for rejoinder**. >The examiner should notify applicants of potential rejoinder of non-elected process claims by placing form paragraph 8.21.04 at the end of any lack of unity determination made between a product and a process of making the product or between a product and a process of using the product. (Emphasis added.)

Applicants respectfully submits that if independent claim 22 is found to be allowable, withdrawn claim 1 should be considered for rejoinder as instructed in the underlined portion of MPEP §1893.03(d) provided above. In addition, Applicants respectfully submits that

if independent claim 22 is found to be allowable, the non-elected species recited in withdrawn claim 33 should also be allowed given that withdrawn claim 33 depends from independent claim 22.

For at least the reasons given above, Applicant respectfully requests rejoinder of at least claims 1 and 33 upon allowance of independent claim 22.

Headings Within The Specification:

As shown above, Applicants have amended the original specification to include headings throughout the original specification.

Claim Objections:

As shown above, Applicants have amended previously presented claim 36 to correct the typographical error relating to the ratio of f to g. In addition, as shown above, Applicants have corrected the original specification on page 21, lines 16-30 relating to the ratio of f to g.

Rejection of Previously Presented Claims 35-38 Under 35 U.S.C. § 112, Second Paragraph

Previously presented claims 35-38 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Applicants respectfully traverse this rejection.

As shown above, Applicants have amended previously presented claim 35 to remove the language “or both” from the claim language and instead recite that “said hydrophilic block comprising at least one of (1) said residue having formula (II) and (2) a hydrophilic unit (-CH₂CR¹X-).”

Regarding claim 36, Applicants respectfully submit that claim 36 does not broaden the scope of previously presented claim 25. For example, in previously presented claim 25, when f = 0.05 and g = 0.90, the ratio of f:g is 18, and when f = 0.10 and g = 0.10, the ratio of f:g is 1. Consequently, previously presented claim 25 provides a broader ratio of f:g (i.e., at least

fig ranging from 1:1 to 1:18) than the ratio recited in claim 36 (i.e., fig ratio ranging from 1:2 to 1:10).

For at least the reasons provided above, Applicants respectfully submit that claims 35-38 meet the definiteness requirements of 35 U.S.C. §112, second paragraph. Accordingly, Applicants respectfully request withdrawal of the rejection of claims 35-38 under 35 U.S.C. §112, second paragraph.

Rejection of Previously presented Claims 1-32 and 35-42 – Non-Statutory Obviousness-Type Double-Patenting In View of U.S. Patent No. 7,199,185 (Heming)¹

Previously presented claims 22-33 and 35-42 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 23-24 of U.S. Patent No. 7,199,185 issued to Heming et al. (hereinafter, “Heming”). This rejection is respectfully traversed.

Claim 23 of Heming is directed to a microcapsule comprising an agrochemical active ingredient in the liquid core of the microcapsule. The microcapsules are dispersed in a discontinuous oil phase of an emulsion having an aqueous continuous phase. Claim 24 of Heming is directed to an oil-in-water emulsion that does not contain an agrochemical active ingredient in the discontinuous oil phase or the aqueous continuous phase of the emulsion.

Claims 22-33 and 35-42 of the present invention are directed to particulate suspensions, namely, a liquid phase having suspended therein a solid substantially insoluble in the liquid phase, wherein the solid material is suspended in the liquid phase via a specific reaction product.

Claims 23-24 of Heming are not directed to particulate suspensions as recited in claims 22-33 and 35-42 of the present invention, and claims 22-33 and 35-42 of the present invention are not directed to emulsions as recited in claims 23-24 of Heming. Consequently, claims 23-24 of Heming do not make obvious Applicants’ claims 22-33 and 35-42. Accordingly,

¹ Although the October 26, 2009 Office Action rejects claims 1-32 and 35-42 in paragraph 31 on page 15, Applicants believe Examiner Kaucher meant claims 22-32 and 35-42.

withdrawal of the obviousness-type double patenting rejection of pending claims 22-33 and 35-42 in view of claims 23-24 of Heming is respectfully requested.

Applicants note that if the only issue preventing allowance of pending claims 22-33 and 35-42 is the obviousness-type double patenting in view of claims 23-24 of Heming, Applicants will be willing to provide a terminal disclaimer disclaiming any patent term of the present invention that would extend beyond the patent term of Heming.

II. Prior Art Rejections:

Rejection of Previously Presented Claims 22-32 and 35-42 Under 35 U.S.C. §102(c) In View Heming

Previously presented claims 22-32 and 35-42 were rejected under 35 U.S.C. §102(c) as being anticipated by Heming. This rejection is respectfully traversed.

In order for the disclosure of Heming to anticipate Applicants' claimed invention, the disclosure of Heming must disclose each and every claim feature recited in the claims. See, for example, *Finnigan Corp. v. International Trade Commission*, 180 F.3d 1354, 1365, 51 USPQ2d 1001, 1009 (Fed. Cir. 1999), in which the Court stated "In order to establish anticipation, a prior art reference must disclose every feature of the claimed invention."

The disclosure of Heming fails to disclose at least the following claim features recited in Applicants' independent claims 22 and 40:

- (1) a particulate suspension comprising (a) a liquid phase, (b) a solid substantially insoluble in the liquid phase and suspended therein, and (c) a reaction product that stabilised the suspension of the solid in the liquid phase, the reaction product being a reaction product of (i) a polymeric stabiliser having a hydrophilic moiety and a hydrophobic moiety and comprising a plurality of vinylic monomers, not being exclusively of vinylic esters or of their hydrolysed products, at least some of which contain functional groups capable of undergoing cross-linking nucleophilic or condensation reactions, and (ii) one or more substances contained in the liquid phase capable of undergoing a cross-linking reaction with said functional groups (claim 22); and
- (2) a particulate suspension comprising (a) a liquid phase, (b) a solid substantially insoluble in the liquid phase and suspended therein, and (c) a suspension-stabilizing reaction

product as described above, wherein the ratio by weight of the polymeric stabiliser prior to cross-linking to the suspended solid is less than 1 part of polymeric stabiliser per 5 parts of suspended solid by weight (claim 22);

(3) a particulate suspension comprising (a) a liquid phase; (b) a reaction product of (i) a polymeric stabiliser having a hydrophilic moiety and a hydrophobic moiety and comprising a plurality of vinylic monomers, not being exclusively of vinylic esters or of their hydrolysed products, at least some of which contain functional groups capable of undergoing cross-linking nucleophilic or condensation reactions, and (ii) one or more substances contained in the liquid phase capable of undergoing a cross-linking reaction with said functional groups; and (c) an agrochemical solid that is substantially insoluble in the liquid phase and suspended within the liquid phase via the reaction product (claim 40); and

(4) a particulate suspension comprising (a) a liquid phase; (b) the above-described reaction product; and (c) an agrochemical solid, wherein the ratio by weight of the polymeric stabiliser prior to cross-linking to the suspended agrochemical solid is less than 1 part of polymeric stabiliser per 5 parts of suspended agrochemical solid by weight (claim 40).

Since the disclosure of Heming fails to disclose each and every claim feature recited in Applicants' independent claims 22 and 40, the disclosure of Heming cannot anticipate independent claims 22 and 40. Since claims 23-32, 35-39 and 41-42 depend from independent claims 22 and 40, and recite additional claim features, the disclosure of Heming cannot anticipate dependent claims 23-32, 35-39 and 41-42. Accordingly, withdrawal of this rejection is respectfully requested.

It should be noted that the disclosure of Heming is not prior art to Applicants' claimed invention under 35 U.S.C. §102(e) given that (1) the present application was filed after November 29, 1999, (2) the present application and Heming were, at the time of the present invention, owned by the same person/entity (i.e., Syngenta AG) or subject to an obligation of assignment to the same person/entity (i.e., Syngenta AG), and (3) the American Inventors Protection Act (AIPA) disqualified any previous 102(e) art that met conditions (1) and (2) (e.g., Heming). See, for example, the Manual Of Patent Examination Procedure (MPEP) §706.02(1)(1), in the subsection entitled "I. COMMON OWNERSHIP OR ASSIGNEE PRIOR

ART EXCLUSION UNDER 35 U.S.C. 103(c).” For this reason, withdrawal of this rejection is also respectfully requested.

Rejection of Previously Presented Claims 22-32 and 39-42 Under 35 U.S.C. §103(a) In View Of U.S. Patent No. 6,262,152 (Fryd)

Previously presented claims 22-32 and 39-42 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of U.S. Patent No. 6,262,152 issued to Fryd et al. (hereinafter, “Fryd”). This rejection is respectfully traversed.

The teaching of Fryd is directed to particulate material dispersed throughout a cross-linked polymer matrix. The disclosed compositions of Fryd comprise a combination of (i) a liquid vehicle, (ii) particles that are at least substantially insoluble in the liquid vehicle, (iii) a polymer dispersant having at least one segment that is soluble in the liquid vehicle and at least one segment that is insoluble in the liquid vehicle with the insoluble segment comprising cross-linking moieties, (iv) at least one cross-linkable component that is cross-linkable with the cross-linking moieties on the insoluble segment(s) of the polymer dispersant, and (iv) one or more optional additives. See, for example, Fryd, column 2, lines 11-28 and column 6, lines 35-52.

The “Background” section of Applicants’ original specification describes in great detail the differences between the compositions of Fryd and Applicants’ claimed invention. See, for example, Applicants’ original specification, from page 1, line 3 to page 2, line 14, and from page 3, line 29 to page 4, line 32. One key difference between the compositions of Fryd and Applicants’ claimed particulate suspensions is Applicants’ claimed ratio by weight of “(a) the polymeric stabiliser prior to cross-linking to (b) the suspended solid” with Applicants’ claimed ratio being less than 1 part of polymeric stabiliser per 5 parts of suspended solid by weight. The teaching of Fryd fails to disclose, teach or suggest such a weight ratio for the disclosed polymer dispersant and solid in the compositions of Fryd.

The only teaching in Fryd regarding the ratio of polymer dispersant to solid is in the examples. Fryd discloses a ratio of 10 parts of polymer dispersant to 15 parts of solid by weight in the following examples: Example 1, column 9, lines 2-3; Example 2, column 10, lines 35-36; Example 3, column 12, lines 7-8; Example 4, column 13, lines 30-31; Example 5, column

14, lines 53-54; and Example 6, column 16, lines 12-13. Fryd discloses a ratio of 1 part of polymer dispersant to 2.5 parts of solid by weight in Example 7, column 16, lines 35-36.

Given the above-noted teaching of Fryd regarding the weight ratio of polymer dispersant to solid, Applicants respectfully submit that the teaching of Fryd actually teaches away from Applicants' claimed ratio of less than 1 part of polymeric stabiliser per 5 parts of suspended solid by weight.

In addition, Applicants respectfully submit that the teaching of Fryd fails to recognize and address the problems associated with particulate suspensions comprising an agrochemical solid. The only mention of agrochemical solids is in the "Background of the Invention" section of Fryd. Applicants respectfully submit that one skilled in the art, given the teaching of Fryd, would not have recognized the problems associated with particulate suspensions comprising an agrochemical solid as addressed in Applicants' claimed invention. The teaching of Fryd would appear to suggest to one skilled in the art the need to utilize a weight ratio of polymer dispersant to solid material of at least 1 part polymer dispersant to 2.5 parts solid material.

For at least the reasons given above, the teaching of Fryd fails to make obvious Applicants' claimed invention as recited in independent claims 22 and 40. Since claims 23-32, 39 and 41-42 depend from independent claims 22 and 40 and recite additional claim features, the teaching of Fryd also fails to make obvious Applicants' claimed invention as recited in claims 23-32, 39 and 41-42. Accordingly, withdrawal of this rejection is respectfully requested.

Regarding dependent claims, such as dependent claims 23, 25-32, 39 and 41-42, Applicants further submit that the teaching of Fryd fails to disclose, teach or suggest the claim features recited in each of dependent claims 23, 25-32, 39 and 41-42. Consequently, in addition to the reasons provided above with regard to the claim features of independent claims 22 and 40, the teaching of Fryd also fails to make obvious Applicants' claimed invention as recited in claims 23, 25-32, 39 and 41-42.

Rejection of Previously Presented Claims 27 and 35-38 Under 35 U.S.C. §103(a) In View Of Fryd In Combination With Jankova

Previously presented claims 27 and 35-38 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of Fryd and further in view of Jankova et al., Macromolecules, 1998, 31, 538-541 (hereinafter, "Jankova"). This rejection is respectfully traversed.

Previously presented claims 27 and 35-38 depend from independent claim 22 and recite additional claim features.

As discussed above, the teaching of Fryd fails to disclose, teach or suggest Applicants' claimed invention as embodied in independent claim 22.

The teaching of Jankova discloses amphiphilic block copolymers and methods of making the same. The teaching of Jankova is not concerned with particulate suspensions or the weight ratio of polymeric stabiliser to suspended solids within particulate suspensions.

Applicants respectfully submit that even if the proposed combination of the teaching of Fryd with the teaching of Jankova is deemed proper, the proposed combination of the teaching of Fryd with the teaching of Jankova fails to teach or suggest Applicants' claimed ratio of less than 1 part of polymeric stabiliser per 5 parts of suspended solid by weight as recited in independent claim 22.

For at least the reasons given above, the proposed combination of the teaching of Fryd with the teaching of Jankova fails to make obvious Applicants' claimed invention as recited in independent claim 22. Since claims 27 and 35-38 depend from independent claim 22 and recite additional claim features, the proposed combination of the teaching of Fryd with the teaching of Jankova also fails to make obvious Applicants' claimed invention as recited in claims 27 and 35-38. Accordingly, withdrawal of this rejection is respectfully requested.

III. Conclusion:

Applicants submit that claims 22-32 and 34-42 define patentable subject matter. Accordingly, Applicants respectfully request allowance of these claims.

Should Examiner Kaucher believe that further action is necessary to place the application in better condition for allowance, Examiner Kaucher is respectfully requested to contact Applicants' representative at the telephone number listed below.

No additional fees are believed due; however, the Commissioner is hereby authorized to charge any deficiency, or credit any overpayment, to Deposit Account No. 503025.

Respectfully submitted,
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